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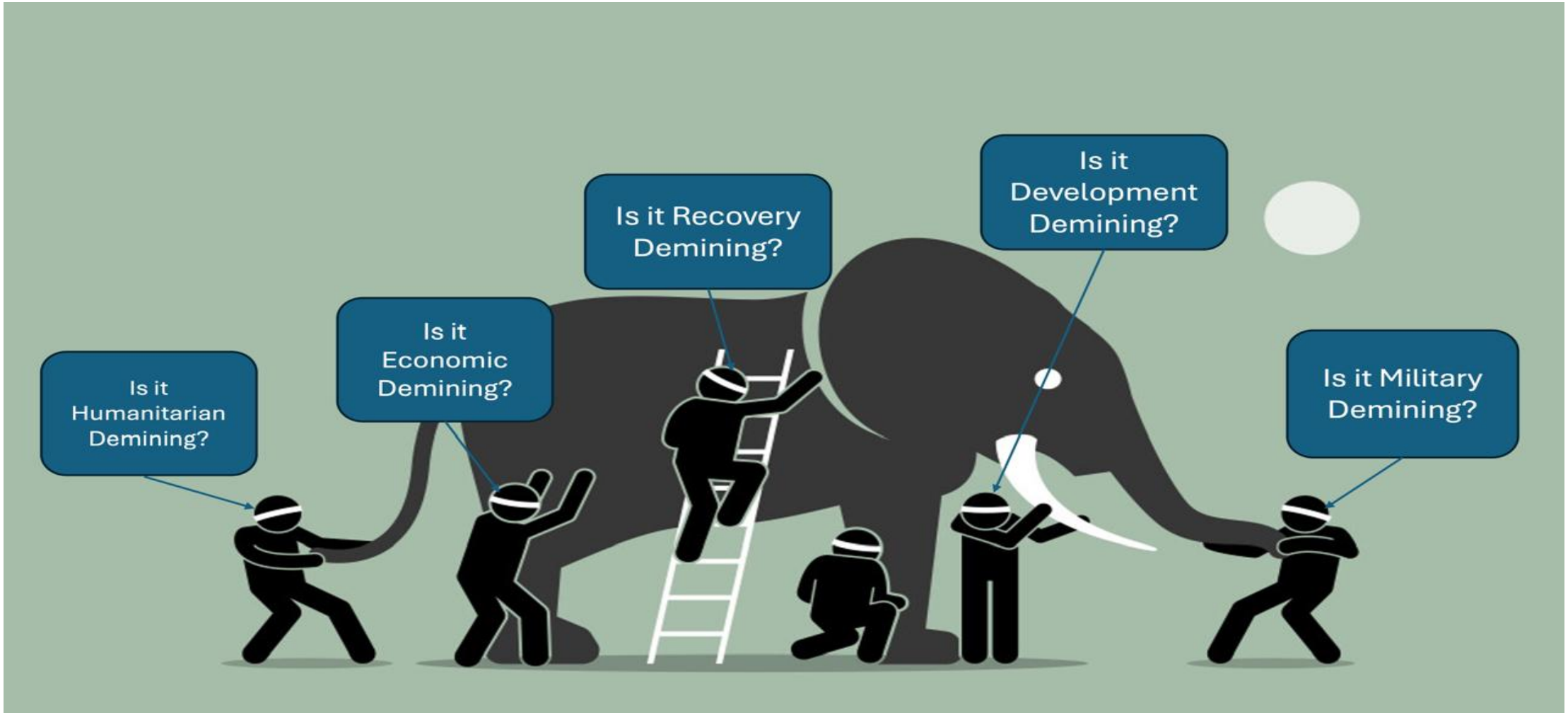
Demine Ukraine

Mine Action in Ukraine

MASG New York
24th October 2024

What is Demining in Ukraine



In a TBI report released last month, it was estimated that Ukraine's annual GDP is $11.2 billion lower as a result of landmines and ERW

Global food security

Annual agricultural and food exports from Ukraine are **$4.3bn lower** as a result of landmines and ERW.

Between 2021-22 and 2024-25, Ukraine's wheat production fell by **41%.**

The fall in wheat production since 2021 could have fed **>40m people worldwide** per year.

Before the full-scale invasion, **more than 90% of exports** went to countries in the Global South.

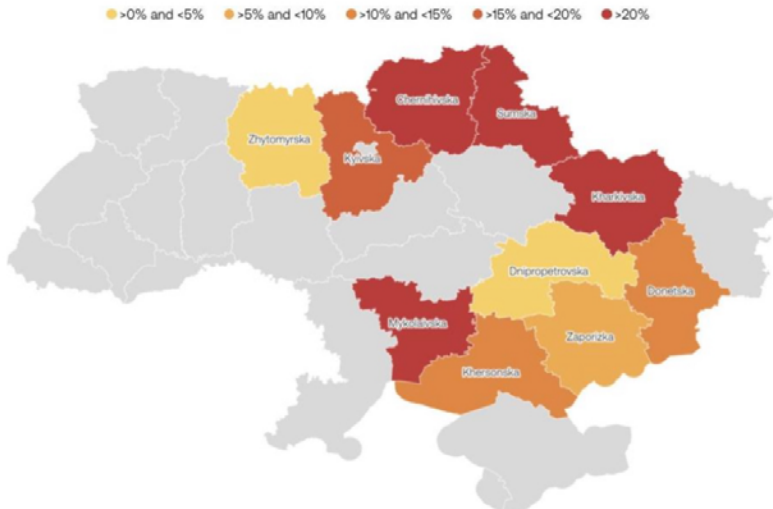
Economic impact

Landmines and ERW suppress Ukraine's GDP by **$11.2bn each year.**

In the most affected regions – such as Kharkiv Oblast – regional GDP is suppressed by **more than 20%**.

Regional tax revenues are **$1.1bn lower annually** due to landmines and ERW.

Overall, landmines and ERW reduce the **value of Ukrainian exports by $8.9bn** each year.



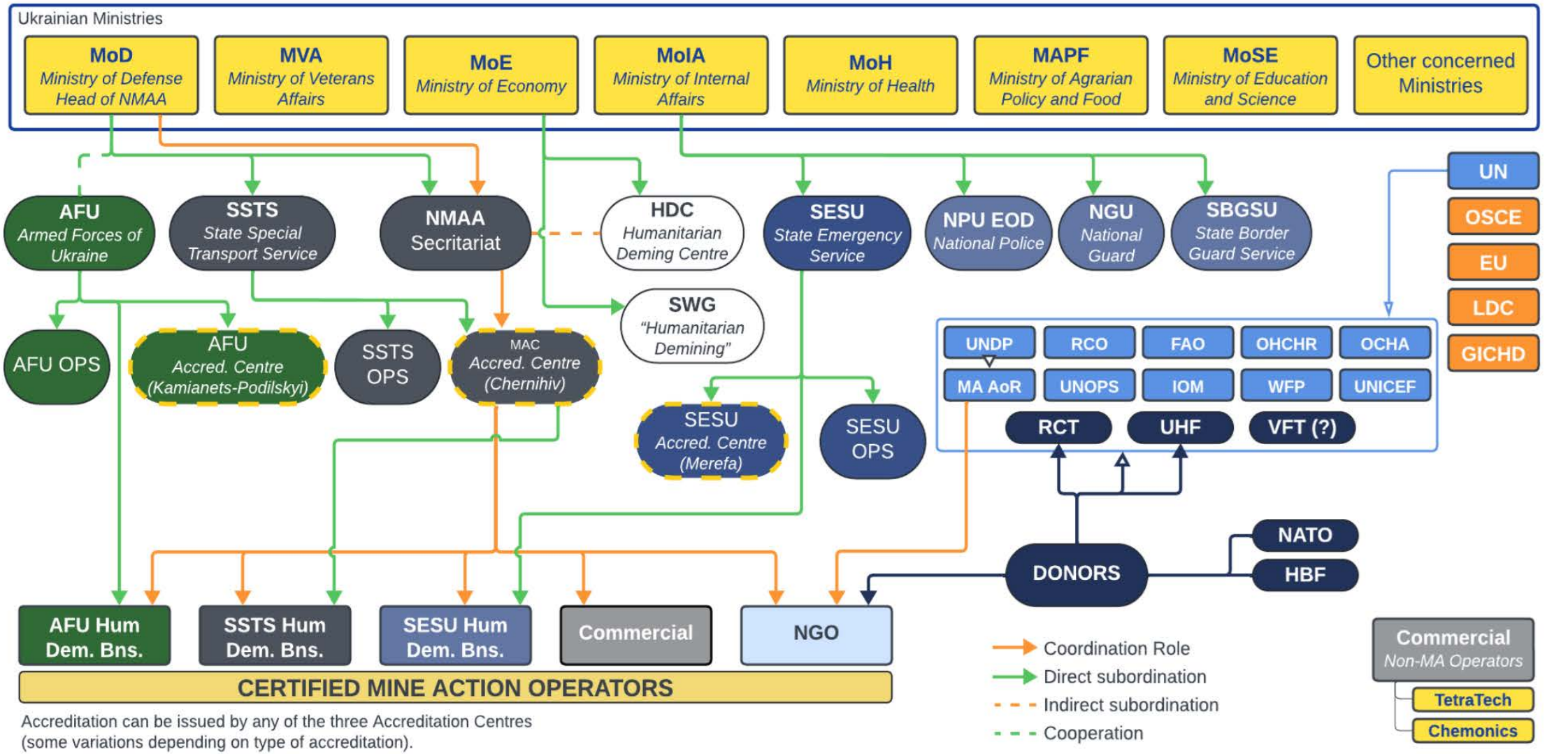
The impact of landmines and ERW on GDP varies across Oblasts

Link to the full report:

TONY BLAIR INSTITUTE FOR GLOBAL CHANGE

Types of munitions found in Ukraine

Mapping Mine Action Stakeholders in Ukraine



Coherence Initiatives

- SWG under Co-chair of DPM, RC and HE Ambassador Japan
- MASG – under chair of Italy
- UN – Inter agency coordination group for Mine Action (Now All UN Agencies meet regularly)
- Mine Action working group on support to Ukraine (UN, GICHD, EU, Tetratech, Chemonics, OSCE, NATO, HBF, LDC, TBI)
- Informal Mine PM meeting
- AOR Mine Action under the protection cluster

Key challenges

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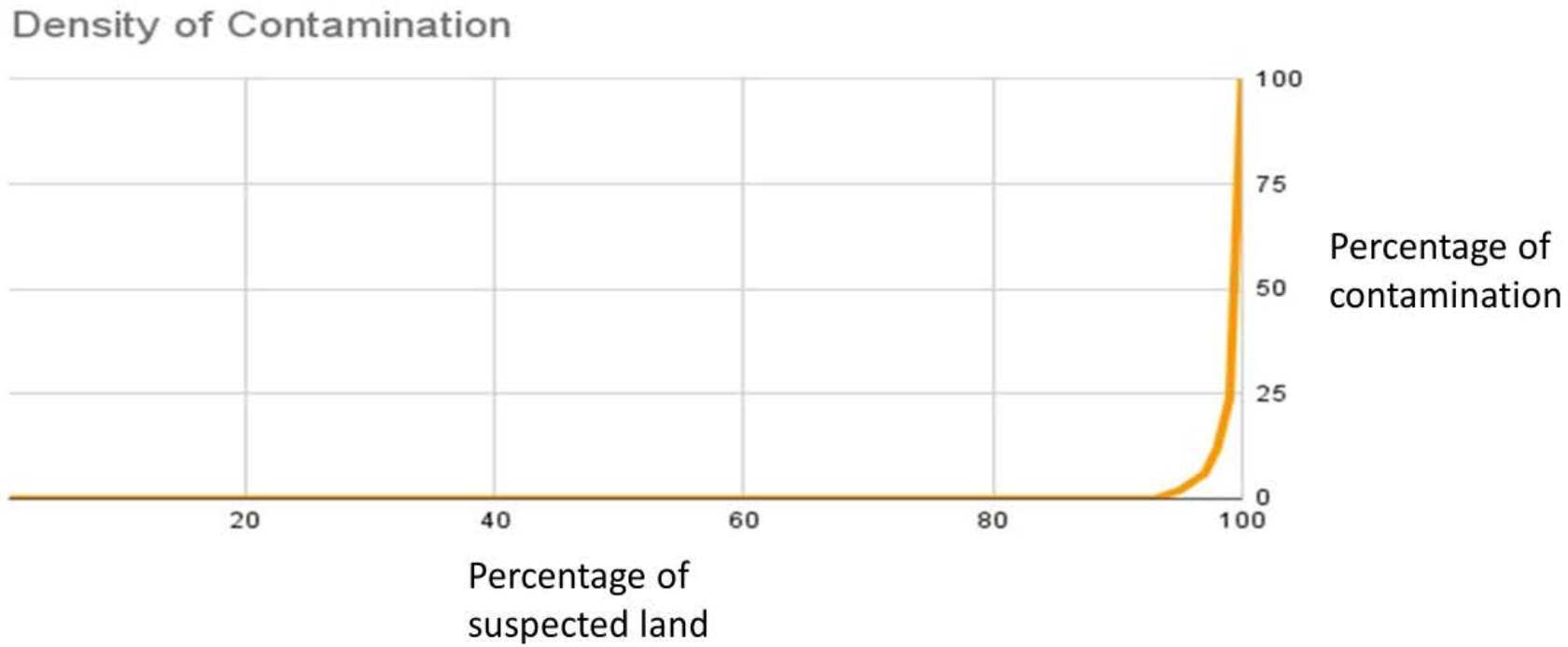
Ukraine has two mine action problems **not** one:

The actual contamination from the detritus of war: Mine, UXO and other explosive contamination – probably the worst seen in Europe since the end of the second world war ! This will require extensive clearance operations conducted to international/Ukrainian standards.

The areas of land that areas suspected of being contaminated (primarily as a result of being occupied by Russian forces) that actually has no contamination and there is no evidence of contamination, but the perception is that it might be dangerous. This will require Innovative solutions and adoption of a risk management approach to mine action in Ukraine until land is confirmed as being contaminated or no evidence of mines is accepted.


Density of Contamination
100
75
50
25
0
20
40
60
80
100
Percentage of contamination
Percentage of suspected land

Two approaches Required:

The Need for Outcome driven high impact demining NOT Output focused demining.

Why is the task a priority, what will be the positive outcomes achieved or negative outcomes avoided by undertaking this task at this time! How does clearing this task help Ukraine.

Adoption of a risk management approach not everything can be done immediately with no current or residual risk.

There are still incidents involving UXO in western Europe from WWI and II

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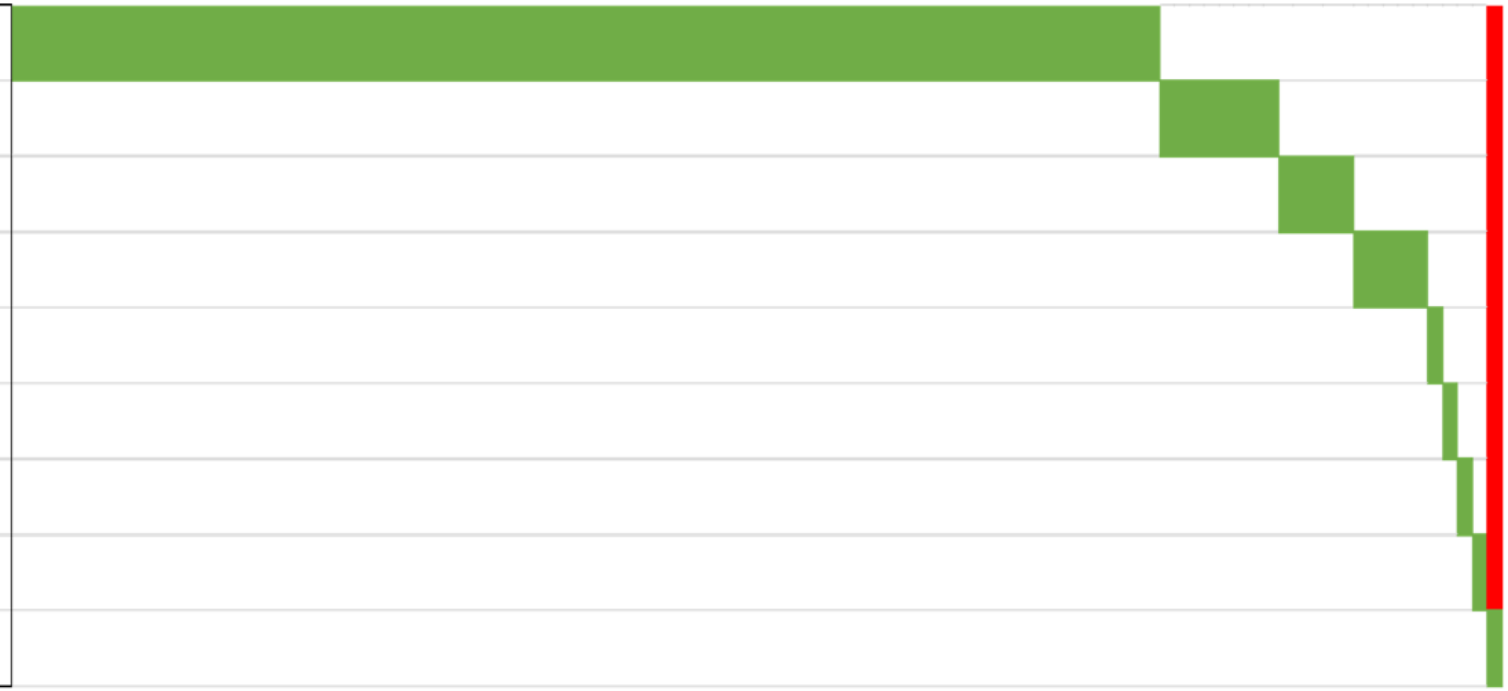
$	Satellite Remote Assessment
$$	Visual Drone Remote assessment
$$$	Technical Survey with Drones
$$$$	Non Technical Survey Rural
$$$$$	Technical Survey with Rollers
$$$$$	Technical Survey with Dogs
$$$$$$	Technical Survey with Flail/Tiller
$$$$$$$	Technical Survey with Manual Teams
$$$$$$$$	Manual Land Release



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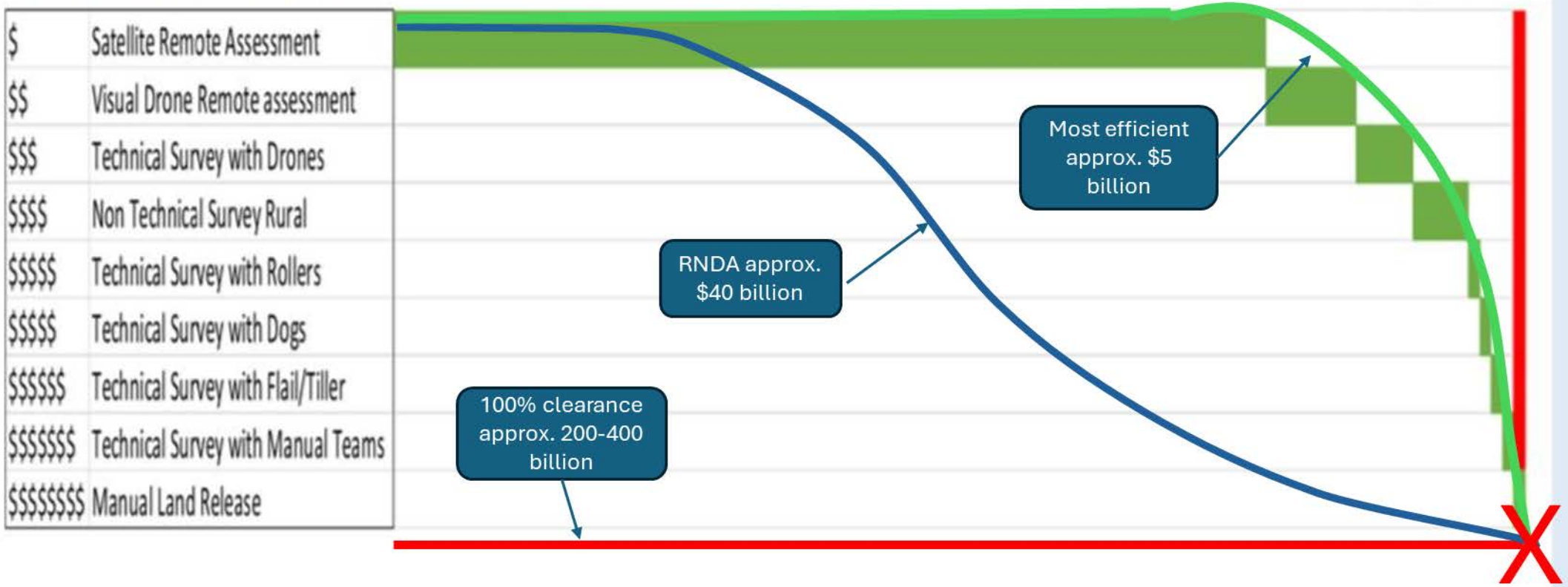


The problem a year ago

On 24 February 2022, the russian federation launched a full-scale invasion into Ukraine using all types of weapons, which led to massive contamination of the territory of Ukraine with mines and explosive remnants of war

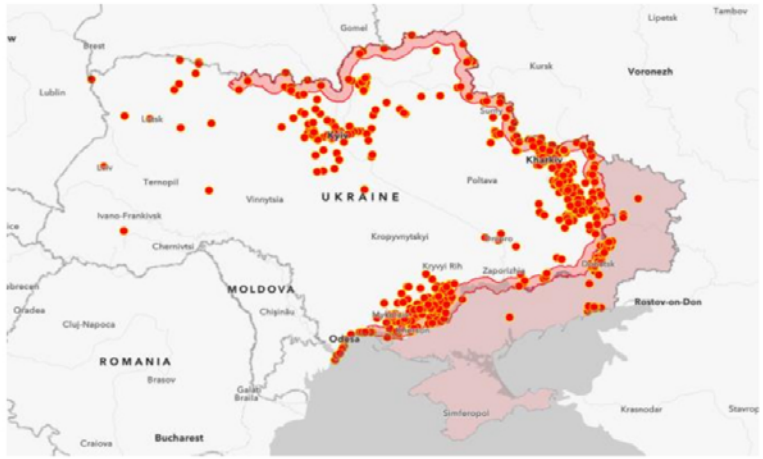
As of 01.01.2024

659 incidents with civilians

666 wounded casualty

297 fatal casualty

73% mine incidents



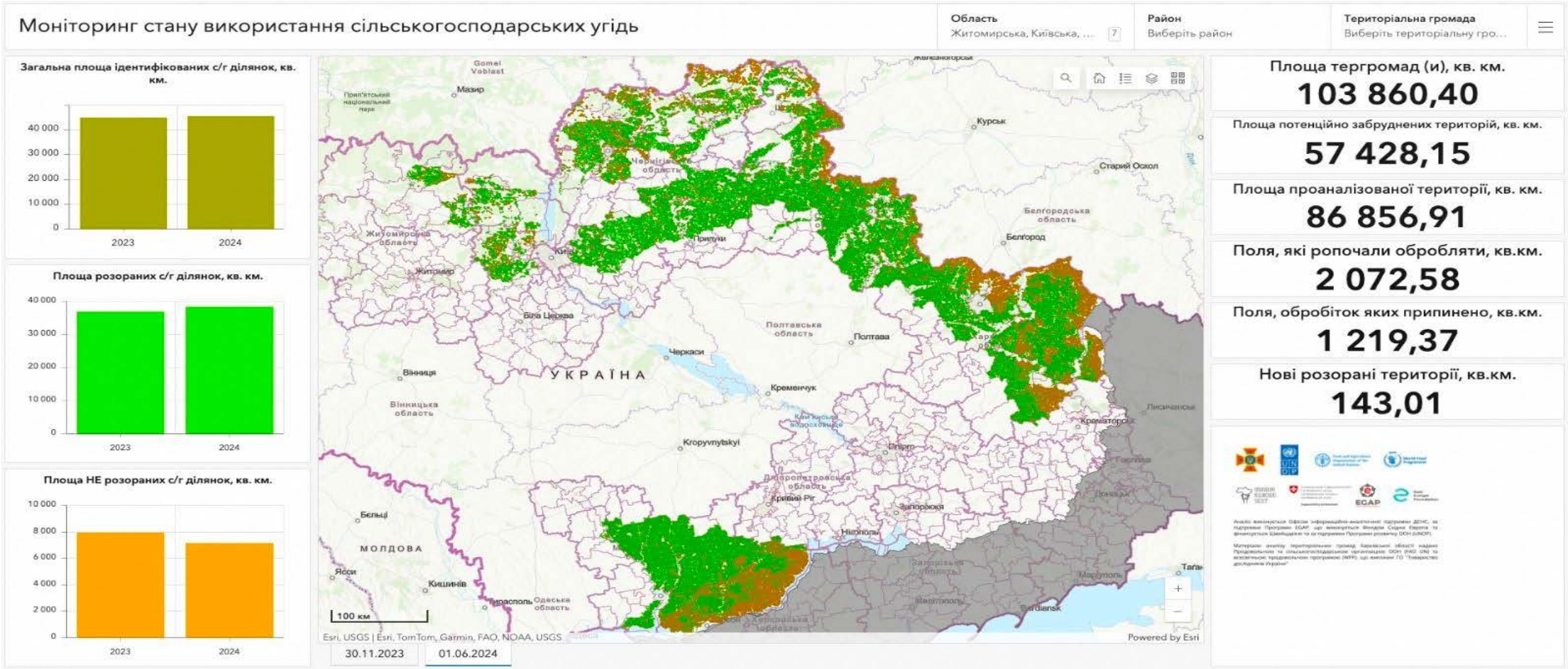
More than **50% of incidents** among the civilian population occurred in **Khersonska, Kharkivska** and **Mykolaivska oblasts.**

The area of the **territory which requires to be surveyed** for explosive ordnance risks **has been reduced to 156 000 square km.**

(18,000 sq. km were marked as "clear from suspicion" in 2023 according to survey results)

15% of population lives in EO risks conditions

Current Threat map Sept 2024




Чернігівська область
Сейм
Старий Оскол
Сумська область
Белґородська область
Житомирська область
Прилуки
Бєлґород
Київ
Житомир
Біла Церква
Полтавська область
Полтава
Черкаси
УКРАЇНА
Вінниця
Кременчук
Вінницька область
Кам'янське водосховище
Kropyvnytskyi
Dnipro
Горлівка
Дніпропетровська область
Кривий Ріг
Донецьк
Запоріжжя
Бєльці
МОЛДОВА
Миколаївська
Powered by Esri

Innovative approaches

Innovative Financing

Energy or agricultural bonds, to support farmers paying for the clearance of their lands.

Restore and repurpose farmlands

- Mitigate the risk of soil contamination of explosive.
  - *Non-usage of explosive*
  - *Reduction of contamination*
  - *Non-food crops*

- Use the land for other source of revenues: solar panels, wind turbines.

Instead of WFP provide food from 150k farmers, WFP will be able to buy off food from 150k farmers

Analytics

Land plots and territories

Land plots and territories

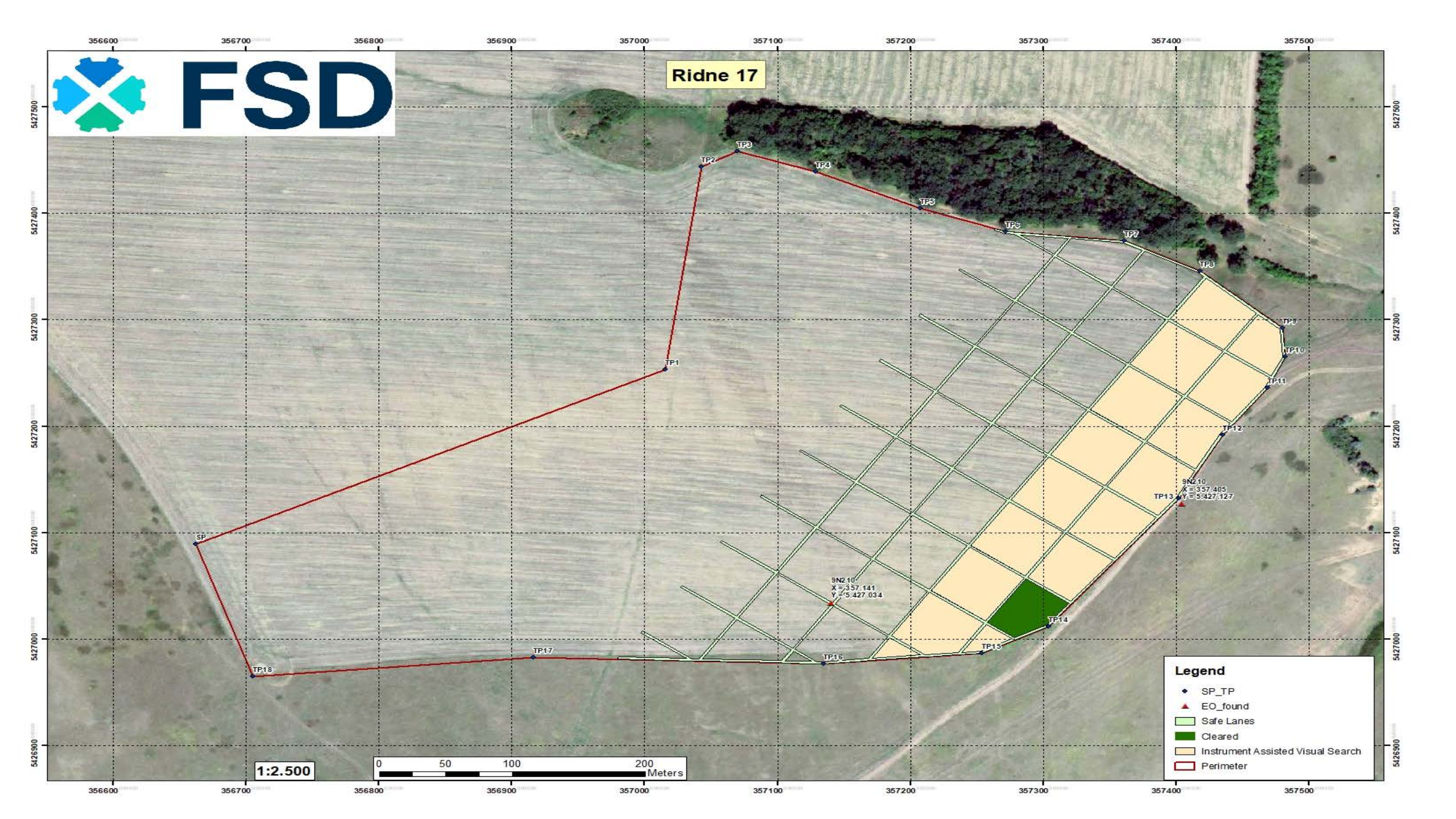
Territories affected by hostilities
139 060 KM2

Returned to the users
34 940 km2

Safe
34 940 km2

- **26,3 km2**
  Through clearance
- **30 376 km**
  of roads cleared
- **4 914 km2**
  Through Rapid Response
- **61 341 km**
  of power lines cleared
- **30 000 km2**
  Through Non-Technical Survey

Two extremes of the Problem


FSD
Ridne 17
356600
356700
356800
356900
357000
357100
357200
357300
357400
357500
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5427400
5427300
5427200
5427100
5427000
5426900
SP
TP1
TP2
TP3
TP4
TP5
TP6
TP7
TP8
TP9
TP10
TP11
TP12
TP13
TP14
TP15
TP16
TP17
TP18
9N2.10
X = 357.405
Y = 5.427.127
9N2.10
X = 357.141
Y = 5.427.034
1:2.500
0
50
100
200
Meters
Legend
SP_TP
EO_found
Safe Lanes
Cleared
Instrument Assisted Visual Search
Perimeter

The other end of the scale

What is the actual problem?

- Are we doing the right thing in the wrong place
- Are we doing the wrong thing in the right place
- The wrong thing in the right way
- The wrong way but the right thing

or

- The wrong thing in the wrong way in the wrong place

but

- We should be doing the right thing in the right place in the right way?

Risk Management is needed:

- Define the Risk
- Ideally remove the risk
- If not possible reduce the risk
- If still not possible mitigate the risk
- Accept the risk and plan for consequences

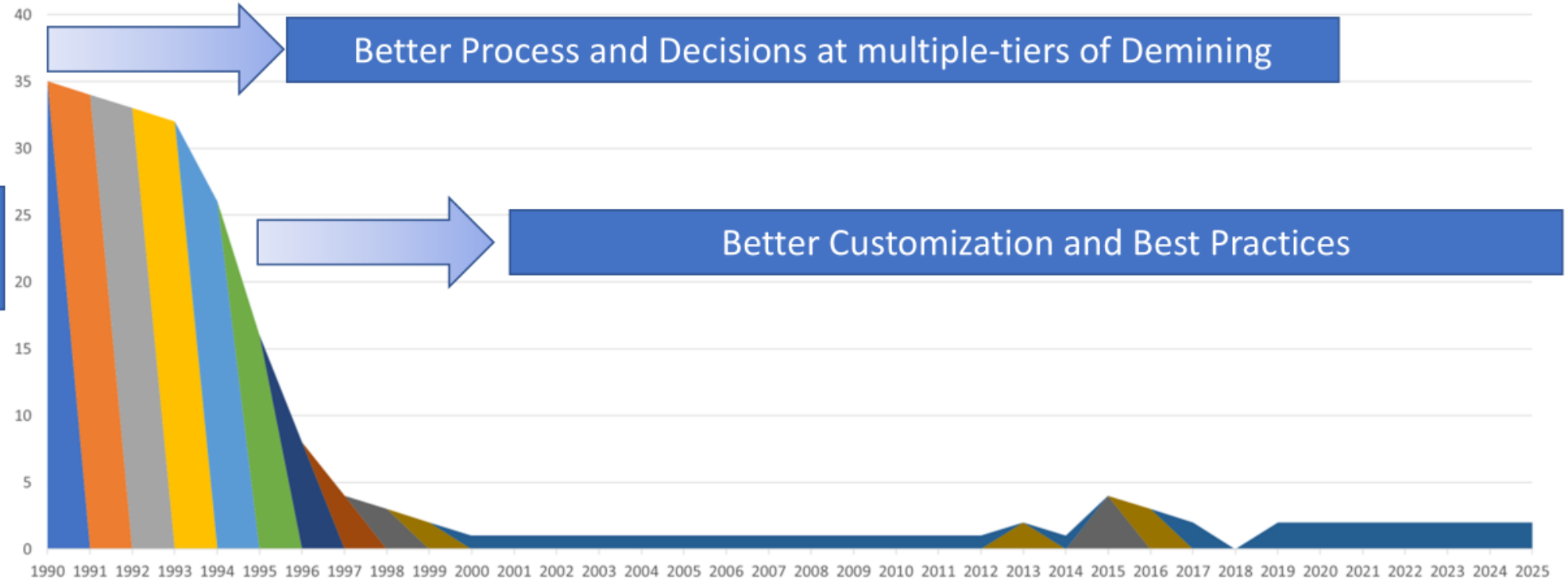
Cumulative Power of Continuous Improvement
Each layer of improvement results in Compounded Impact on Cost

Historical Cost/sq meter for Mine Clearance: 1990 - present

Better Process and Decisions at multiple-tiers of Demining

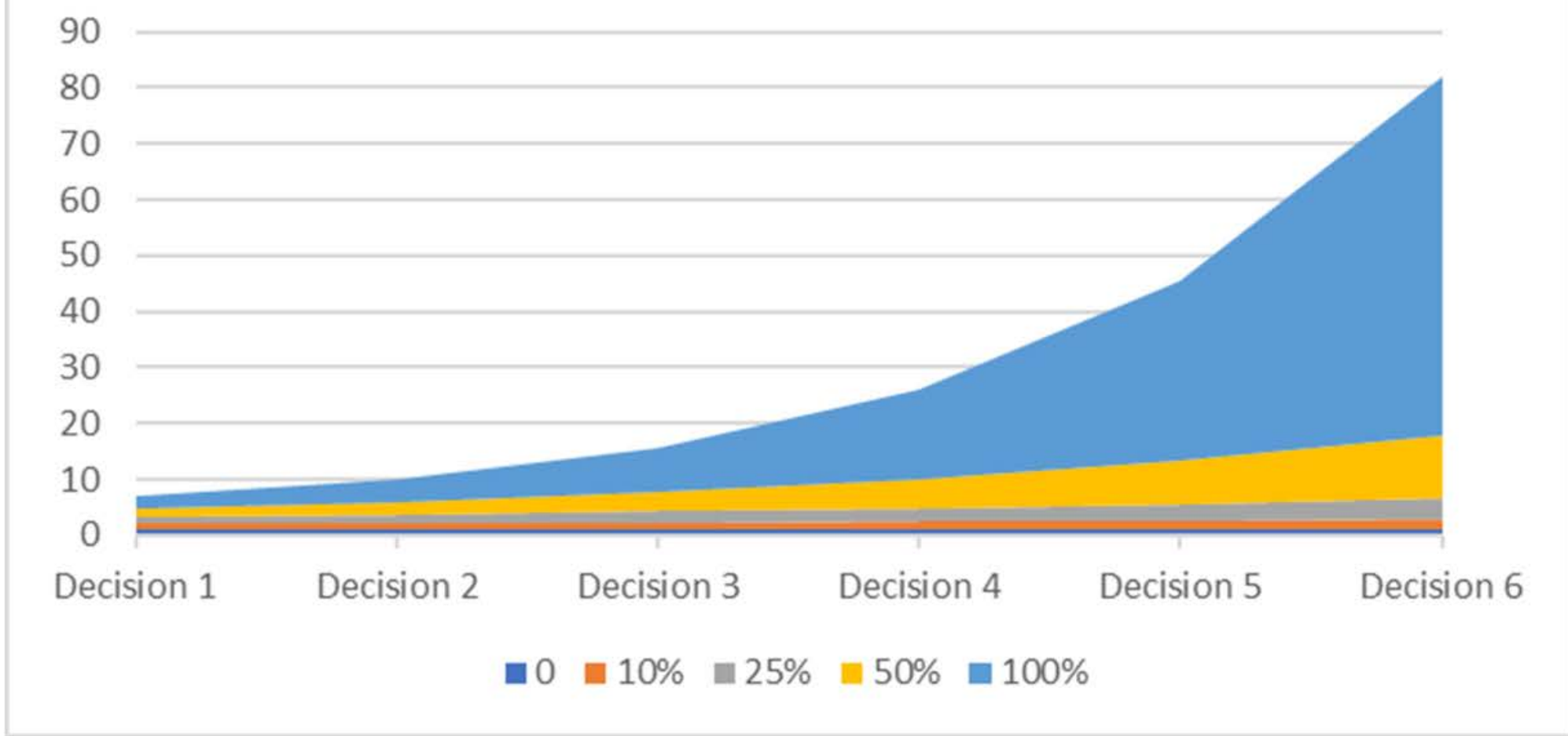
Better Customization and Best Practices

Cost, $/sq meter



YEAR

Cumulative deterioration with cascaded poor decisions
Each layer does not Add, but Multiplies the inefficiency



What has gone well in past 12 months:

- Government Ownership
- SWG
- National Strategy adopted
- Huge Resources provided by donors
- Increased national capacities of SESU, SSTS, Police EOD
- More coherence in the sector
- Adoption of “no evidence of mines” leading to 30,000+ sq km no longer being suspected
- Adoption of new technologies
- “built in Ukraine” imitative
- Close to achieving data integration
- Increased use of NTS
- Dog for land release and machines being accredited
- National budget allocated for mine action
- Compensation schemes being explored
- Exploring innovative financing options
- Development of Concept notes to fill capacity gaps – funding is still required!

Where there are still challenges

- National standards still need to be updated and adopted
- Lack of scale of capacity to meet the needs of the sector, particularly for QM, QC and tasking
- NMAC need more support
- Backlog of requests with NMAC
- Data still not fully integrated
- More support for regional MACC needed
- Lack of transparency over allocation of donated equipment
- Lack of logistics capacity to support equipment donations and keep them operational
- Terminology and differences between operational demining and demining to international standards. And a understanding of military demining, non military demining, economic demining, humanitarian demining, recovery demining and development demining

How can the UN assist Ukraine in Mine Action:

- Supporting implementation of National Strategy
- Support cohesion across the sector
- Revision of National Standards
- Development and Provision of Technical expertise particularly on Skills and Equipment needed
- Development of Train the Trainer training packages
- Development of Risk management approach with regard to the management and mitigation of explosive hazards
- Support effective Quality Management Processes
- Improve quality and relevance of requests for support – context driven concept notes
- Improved Information management and data integration for allocation of resources, prioritization and measurement of impact.
- Reduce bureaucracy and identify conflicting legislation
- Make recommendations to increase efficiency across the sector
- Support logistics for mine action capacity in country
- Support the creation of mine action service market place
- Support the development of innovative finance mechanisms

Coherence/Prioritization/Improved Efficiencies/Resource Management

5 Outcomes:

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The One UN approach in mine action in Ukraine pursues five outcomes intended to capture the different strategic and long-term aims of the sector and strive for increased peace and human security, and support towards development in Ukraine - the common vision drawn from mine action global sector-wide Theory of Change (ToC).

1. Ukraine's mine action strategy implemented & supported, where possible relevant treaty obligations met.
2. Increased community resilience to conflict drivers, contributes to stability and peacebuilding.
3. Economic development and more resilient communities contribute to Sustainable Development Goals (SDGs).
4. Safer communities and reduced deaths and injuries from mines and explosive remnants of war (ERW).
5. Increase Efficiency across the sector too reduce the amount of national debt incurred to solve this problem

Recommendations:

1) We need to look at investing in human capitol, logistics, prioritization, tasking and QA/QM to improve efficiency and effectiveness

2) We need to revising standards and aligning them with IMAS, and creating SOP for complicated tasks that incorporate risk management developing proper QA/QM, clear and appropriate task dossiers, linked to prioritization & outcomes etc

3) The donors/organizations/entities must meet to agree what we want to see from the government on this. Then we need to go to the MoE, MOD and MOI as a unified sector agree what is needed and what support will be given to Ukraine over the next 5 years. No more shopping lists. Going forward requests are in a concept note format outlining: need:, resources available, resource shortfall, consequences of this shortfall, prioritiezed request, expected outcomes.

4) Everything is in line with national strategy
National standards bench marked and amended to IMAS, adopted and followed
Strive for minimal duplication across the sector
There is integrated data.
Transparency over equipment donations and use
Logistics and support processes in place and accepted as needed
Prioritization of tasks taking into account: impact, outcome, risk and funding source requirements
Active task management and support via a proper. QM/QA feedback loop
Field driven innovations and acceptance of appropriate risk
Rapid issuance of completion certificate's and compensation payments (if due).

5) Map process of logistical support, appropriate outcome drive risk based tasking needs to be developed with proper QA/QM (not just sampling) and delegated decision making to a lower level (Oblast or further) on cancelation is needed.

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Mathias Schmale
Resident & Humanitarian Coordinator in Ukraine
rco.ukraine@un.org

Jaco Cilliers
UNDP Resident Representative in Ukraine
jaco.cilliers@undp.org

Paul Heslop
Senior Mine Action Technical Advisor to the RC & UNCT
heslop@un.org
+380 50 459 1565